

NATIONAL TRANSPORTATION SAFETY BOARD

OFFICE OF MARINE SAFETY

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Sunday, February 18, 2001

INTERVIEW OF CAPT BRANDHUBER (continued)

INTERVIEWING PANEL:

National Transportation Safety Board

TOM ROTH-ROFFY, Investigator
 BILL WOODY
 BARRY STRAUCH

United States Navy

CDR JOHN CACCIVIO, SUBPAC
 LT DOUG HEDRICK, SUBPAC
 LCDR RICH SANTOMAURO

United States Coast Guard

LTJG KEN KUSANO
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[TRANSCRIPT PREPARED FROM A TAPE RECORDING.]

P R O C E E D I N G S

LCDR SANTOMAURO: This Lieutenant-Commander Santomauro.

I don't have any questions for you, Captain.

I do have a few comments, based on your vivid description of the events and what you had to go through that day.

I am sure that many of the guys that were supporting the officers of the deck are saying to themselves, "What if, what if, what if." Members of this Board and many of the newspapers, I have heard surprise that a nuclear submarine did not know that this fishing vessel was on -- yet, having been in a submarine for 28 years, I have been able to see the technology advance from a sonar information on paper, where you printed out the scroll, to the information being placed on [inaudible]. However, a lot of the information is left open to interpolation.

We are modernizing the fleet as quickly as possible, and that is my particular area, is modernization. We are getting there as fast as we can, however, funding has been a concern. In order to put systems onboard a submarine, you have to compress them down to a small space and figure out how we are going

1 to actually put these new systems in to make them work
2 and interact with each other in the best possible way,
3 and it is a very expensive proposition. It costs a lot
4 of money.

5 In the same sense, we still have to operate
6 these submarines in defense of the country. Every day,
7 we hear about budget cuts and the fact that Defense is
8 not getting enough money for modernization, for
9 maintenance. That is readily available news right now.

10 I think modernizing the fleet to the point
11 where that sonarman or fire controlman can interpret
12 the data that is available to him in a faster manner is
13 something that is very important to us. I think it
14 would be very important to avoiding disasters, tragic
15 incidents like this in the future, if we can put that
16 technology on our submarines, and surface ships as
17 well.

18 That is about all I have to say from the
19 technical standpoint. That is all I have.

20 CDR CACCIVIO: This is Commander Caccivio.

21 Captain Brandhuber, I am going to ask you a
22 couple of questions here, just to make sure that I
23 articulate for myself an understanding of some comments
24 you made earlier, for myself and the rest of the

1 members on the Board. I do appreciate your efforts
2 here today. I realize this has been a long day, so I
3 will try to move through these as quickly as possible.

4 It has been referred to that the ship did
5 minor angles of 3 to 5 degrees, and low speeds with
6 turns for the purpose of allowing the civilians to
7 become acquainted with operating the ship under a UI
8 condition. Later, that those watches were secured and
9 the ship conducted high-speed angles and dangles, and
10 as we demonstrated to some members of the NTSB
11 yesterday morning, angles up to approximately 25
12 degrees.

13 I am concerned about the perception that high
14 speed, and angles and dangles may convey an image of
15 mustang GTO traveling down H-1 at 90 miles an hour as a
16 joy ride condition.

17 Can you explain to us why boats practice so
18 diligently high-speed angles and dangles, as referred
19 to them, in maneuvers?

20 CAPT BRANDHUBER: Sure. I touched on it
21 briefly, but basically, it is torpedo evasion in combat
22 situations for interactions with other submarines or
23 surface ships that have launched weapons in the water
24 to protect the ship. It is a key war-fighting skill

1 that that ship has to be able to handle.

2 CDR CACCIVIO: Would it be reasonable to
3 expect that if a ship could not conduct angles and
4 dangles at high speed safely in a wartime situation,
5 that this may result in losing the vessel?

6 CAPT BRANDHUBER: Absolutely.

7 CDR CACCIVIO: Okay. We have referred to a
8 point referred to as PH. Just to clarify some of my
9 questions, PH is not a geographic point -- it is not a
10 object, it is a geographic point represented on the
11 chart on the entrance to Pearl Harbor. Submarines use
12 this point to line up on for their approach to Pearl
13 Harbor. It ensures that they are safely in the center
14 of the channel, so as not to run aground on either
15 side.

16 Because we know it takes approximately an
17 hour to get from PH to the piers, typically, we arrange
18 schedule times based on a PH in lieu of a pier time.
19 Pier time is also available, too.

20 Captain, have you ever known boats to not
21 make their PH time?

22 CAPT BRANDHUBER: Sure.

23 CDR CACCIVIO: As a squire commodore, have
24 you ever felt it was necessary to chastise a CO who did

1 not make his PH time?

2 CAPT BRANDHUBER: Absolutely not, never.

3 Never.

4 CDR CACCIVIO: As the chief of staff now,
5 would it be a reasonable expectation, if a boat called
6 up and said it was delayed half an hour and could not
7 make its PH time, would that be a significant issue for
8 the tug commander?

9 CAPT BRANDHUBER: No. As a matter of fact, I
10 am usually plugged into operations in this area more
11 than I am in San Diego or up in Bangor. If I become
12 aware of that, I keep that in perspective, too. There
13 are ships operating in and out of Tokyo, and operating
14 in and out of Bangor or Seattle, or down in San Diego,
15 that I have no insight into whether they are making
16 their time, give or take, you know, an hour, or two
17 hours, three hours.

18 If we get to the point where we are looking
19 at sub missed, sub look, sub sunk, then it becomes a
20 very critical item to me, but as far as, you know, an
21 hour, or two hours either way, of the guy is late and
22 he has called up on the HICOM and said, "Hey, I am
23 running a little bit late," no, no issue at all.

24 CDR CACCIVIO: Let me clarify it, then. I am

1 just referring to conditions where we are obviously in
2 contact with the boat the whole time.

3 CAPT BRANDHUBER: Yes. Yes.

4 CDR CACCIVIO: So, would you expect it would
5 be reasonable that if a CO called up and asked to
6 adjust his PH time, if there wasn't some other boat
7 that needed to commit that time, that we would simply
8 grant that?

9 CAPT BRANDHUBER: Absolutely, and even if
10 there was another boat, all it would be is a matter of
11 executing the tugs and moving them around. There is no
12 issue here that has anything to do with making a
13 return-to-port time. If you get later in the day,
14 where you start talking about coming in in the evening
15 after dark, then we think about it a little bit, but it
16 is still not a driver at all.

17 CDR CACCIVIO: If darkness became a
18 consideration, would it be a problem just to leave the
19 boat out overnight and bring them in at an early-
20 morning hour?

21 CAPT BRANDHUBER: And sometimes ships come in
22 at night, and they do that very safely, too, but it
23 would be something that we would think about.

24 CDR CACCIVIO: I realize you can't answer for

1 all the COs out there on the waterfront, but do you
2 feel that the COs have an understanding of the fact
3 that they can adjust their PH time if they need to?

4 CAPT BRANDHUBER: Yes. I would tell you that
5 they have an understanding that safety is always
6 paramount, and if safety means that you feel that you
7 are pressed for some hour on the clock, that is not an
8 issue.

9 CDR CACCIVIO: Okay. Thank you very much.
10 You commented on the fact that the submarine, one of
11 the reasons for demonstrating the emergency deep
12 procedure was a procedure that we have developed in the
13 event that while at periscope depth of a contact were,
14 say, to come out of a haze or we had to go deep, that
15 it allows us to rapidly depart periscope depth and get
16 back down to a safer depth to avoid collision.

17 CAPT BRANDHUBER: Avoid collision, yes.

18 CDR CACCIVIO: Could you see where executing
19 an emergency deep in this situation, just prior to
20 conducting an emergency main ballast tank blow, would
21 be beneficial?

22 CAPT BRANDHUBER: Yes, the reason being is
23 that once you have determined -- if you have
24 cognitively determined, by observation, that you don't

1 feel you have any contacts, then if you are going to do
2 the emergency blow, minimizing the amount of time from
3 the time that you have cognitively made the look-around
4 to say, "I don't see anything," minimizing that amount
5 of time from the time you get down to the point that
6 you are going to be, and coming back up, is clearly an
7 advantage. You want to minimize the amount of time
8 that you haven't got full situational awareness of the
9 picture on the surface.

10 CDR CACCIVIO: Yes, sir. I am kind of
11 jumping around between areas, so I appreciate your
12 efforts here to keep up with me.

13 So if I look at this from an operational risk
14 management perspective, is it reasonable to draw the
15 conclusion that once all the sailors were safe in the
16 boat, that because of the physical characteristics of
17 the submarine, the available sea conditions at the
18 time, that a decision was made that the risk would be
19 higher to the Japanese personnel in the vessels to try
20 and bring them onboard the submarine then rather leave
21 them safely in their monitored their condition?

22 CAPT BRANDHUBER: Absolutely. No question.
23 I think I talked a little bit about that. I will say
24 it one more time, and that is, knowing that you didn't

1 know what the condition of the people was inside of the
2 rafts, it is still, to me, without being able to
3 communicate and knowing that, it was the right
4 decision, based on the sea state that was out there and
5 the fact that the Coast Guard was on its way, and the
6 fact that a helicopter was there relatively shortly
7 thereafter. It was absolutely the right decision not
8 to put people on deck.

9 If we had seen somebody in the water -- the
10 ladder was over the top of the sail -- we would have
11 taken one of the divers that was standing down at the
12 bottom of the thing and worked on trying to get that
13 person with the line and the harness -- not the
14 harness, but the life raft and things like that, to get
15 that person to him so that we could bring him -- either
16 cognitively reevaluate the situation to put him on main
17 deck and bring him in or use the BRA-34 and the diver
18 to try to bring him up, or get him to a life raft that
19 was out there, but there was never anybody in the
20 water.

21 CDR CACCIVIO: Yes, sir. You made reference
22 here to what is the Faruno commercial radar, which is
23 maintaining our submarines. You also indicated that
24 the ship's permanently installed BPS-15 antenna was

1 determined to be out of commission at the time.

2 Would you consider the Faruno radar that most
3 submarines carry to be a suitable substitute, in terms
4 of capabilities, for the BPS-15 H?

5 CAPT BRANDHUBER: Absolutely. The Faruno
6 radar is a very good product. We have carried them
7 onboard and mounted them over time. In amplification,
8 it beats the 15, because we actually think, with the
9 process of installing modernization and things of that
10 nature, that the Faruno has, in display and in things
11 like that, has incorporated the technology to allow it
12 to be more user friendly and show CPAs quicker and
13 things of that nature than what the traditional system
14 is for closest point of approach, the closest point of
15 approach, the contact coming here, this is what we
16 think it is.

17 It has a data processing capability, a nice
18 display and allows some selectable options by the
19 operator that makes it a little bit better.

20 CDR CACCIVIO: Yes, sir. So, is it
21 reasonable to say that even with the ship's BPS-15 H
22 radar out of commission, that the ship's radar
23 capability was not degraded?

24 CAPT BRANDHUBER: Only until -- it was

1 degraded during the time that it took to mount the
2 Faruno radar. You could raise the -- unplug the mast,
3 raise the BPS-15 and have it rotating and radiating
4 faster. You know that, John, faster than you can haul
5 up the Faruno antenna, lash it through the strap and
6 get it around. But once it was hauled up there and
7 lashed in, we weren't degraded at all.

8 CDR CACCIVIO: Okay. Whose permission is
9 required to use active sonar in a local operators -- in
10 a local operation area, excuse me, as a line operator?

11 CAPT BRANDHUBER: Well, let's -- the specific
12 answer is, I would have to check. I think we control
13 that through the divers and through -- I don't know how
14 it works, but we just sometimes can't just go active
15 all the time because of concerns for divers.

16 CDR CACCIVIO: Okay, let me articulate my
17 question.

18 CAPT BRANDHUBER: The ship's diving -- people
19 diving, you know, the impact on their -- now, if you
20 are far and about, it becomes a non-point, but as you
21 move in and out, we receive diver flags and divers in
22 operations. We don't go active on sonar just so we can
23 have a great day. You know, I mean --

24 CDR CACCIVIO: Let me rephrase the question,

1 then. Is it within the COs --

2 CAPT BRANDHUBER: Yes.

3 CDR CACCIVIO: -- authorization to use active
4 for training?

5 CAPT BRANDHUBER: Yes.

6 CDR CACCIVIO: Do COs routinely use active
7 training?

8 CAPT BRANDHUBER: Yes. Yes.

9 CDR CACCIVIO: Do you know, was there -- I
10 mean, was it construed at any time in this evolution
11 that active sonar could not be used?

12 CAPT BRANDHUBER: No, not that I was aware of
13 at all.

14 CDR CACCIVIO: Okay. I am going to omit my
15 questions that I had with respect to the drawbacks to
16 use of active sonar, because I think we have covered
17 those already.

18 Just for the record, though, I want to
19 clarify I used the term "TICOM" and "TICOM
20 representative," referring to the chief of staff.
21 TICOM is short for Titan commander, and they are
22 referring to him as the Titan commander representative
23 if he is formerly representing the Titan commander
24 onboard. That what I was referring to.

1 Is the Admiral, can I say, a pretty outgoing,
2 gregarious guy?

3 CAPT BRANDHUBER: Do porpoises swim in the
4 water?

5 CDR CACCIVIO: Okay. Please note that as a
6 yes. Do a lot of people call the Admiral?

7 CAPT BRANDHUBER: Big Al, the sailor's pal

8 CDR CACCIVIO: Do a lot of people make
9 requests to the Admiral?

10 CAPT BRANDHUBER: Absolutely.

11 CDR CACCIVIO: Is the Admiral pretty good at
12 taking anybody's request and funneling it out to the
13 staff or the Captain?

14 CAPT BRANDHUBER: Absolutely. If I amplify
15 on that. I had no insight into that at all until six
16 months ago. I have access to many of this personal
17 communications, many of his phone calls, and many of
18 his e-mails. I have never seen anybody in my life who
19 has as many people that he knows, and associates that
20 he has, as Big Al, the sailor's pal. I mean, he knows
21 people, from all the flag officers, the retired flag
22 officers and stuff like that, to Larry King, to Wall
23 Street Journal, to Japanese officials.

24 He has been on the phone almost continuously

1 with people that he knows in Japan who have expressed
2 their sympathy, and he has expressed, of course, his
3 apology to those people privately. Whether they be
4 public people or private citizens, he knows a lot of
5 people and he is in communication with many of them,
6 and he is a very large persona, more so than, probably,
7 any -- definitely more so than any submariner I have
8 ever met, more so than many people I have met.

9 CDR CACCIVIO: Yes, sir. Has he been
10 actively engaged in supporting the Secretary of
11 Defense's policy of interacting with the civilian
12 community --

13 CAPT BRANDHUBER: Absolutely.

14 CDR CACCIVIO: -- to get them involved with
15 the military?

16 CAPT BRANDHUBER: Absolutely.

17 CDR CACCIVIO: So, would it be reasonable to
18 expect that people would make direct requests to the
19 Admiral for underway requests?

20 CAPT BRANDHUBER: Absolutely.

21 CDR CACCIVIO: Would it be even more
22 reasonable to expect that a retired admiral, that
23 Admiral Knetsey [ph], may have known, would call him or
24 e-mail him to ask him for a request?

1 CAPT BRANDHUBER: Absolutely. If I may, for
2 the record, we certainly didn't sit back and discern
3 that this one retired admiral versus another retired
4 admiral had had some particular difficulties, or not
5 difficulties.

6 This was strictly, here is a guy who -- and I
7 will tell you -- here is another thing, too. Do we
8 turn down these people sometimes? You bet your fanny
9 we do. We will put them on the hold list and say, you
10 know, we -- to try to get them somewhere down the road.

11 They may want certain dates, certain times, a certain
12 window, and there is nobody available, and we just tell
13 them, "Sorry, we can't do that. We can't do that."

14 So it isn't carte blanche; everybody who
15 knocks on the door gets in, but it is -- there are an
16 awful lot of people he knows who make requests for him
17 to do that.

18 CDR CACCIVIO: Yes, sir. Could you
19 characterize whether a visitor comes onboard and he is
20 a retired admiral, or whether a visitor and he was a
21 sonar technician for World War II, that it is the
22 submarine policy to treat all visitors as VIPs?

23 CAPT BRANDHUBER: Absolutely.

24 CDR CACCIVIO: So really, the agenda would be

1 left up to the boat to determine, unless it was
2 specifically requested from the individuals?

3 CAPT BRANDHUBER: Absolutely.

4 CDR CACCIVIO: Our policy is to treat
5 everybody the same?

6 CAPT BRANDHUBER: Anyone who crosses that
7 brow to ride on the submarine is a VIP, from our
8 perspective and we will treat them with the appropriate
9 degree of dignity and respect.

10 Now, if you would cross to the Ward Room,
11 eating versus crew's mess eating, would be the only
12 thing that I could see the distinguishing line, and
13 sometimes we have people eat in the crew's mess, only
14 because it is more expeditious, and not because of
15 their position or anything else. That is just the way
16 it is. It is a small ship and not a lot of room, and
17 that is the way it is.

18 CDR CACCIVIO: Okay. Captain, one more
19 question, then I am going to jump back. When you have
20 done VSPs, brief stops, personnel at sea, or boat
21 transfers, I should say, did you typically do those
22 dead in the water, or did you do those with a one-third
23 to an eight knot?

24 CAPT BRANDHUBER: A little bit of speed on

1 the ship, based on the fact that the craft that you
2 were warring with would come up alongside and you could
3 maintain some degree of control of the ship's head and
4 the direction of the seas, and the fact that the ship
5 was mooring with yours that you were doing the VSP
6 with, could then come alongside and match those speeds.

7 It was a safer evolution because you could take
8 direction of the seas, make yourself a little bit of a
9 lead and walk along in that direction to do the
10 transfer.

11 Now, I have done them dead in the water too.

12 Depending upon if it is zero sea state and it is a
13 flat calm day and everything else, yes, that is okay,
14 but if there is any type of sea at all and the ship is
15 smaller than the submarine, and you get this up and
16 down motion and stuff like that, you mitigate that
17 somewhat by coming up alongside.

18 CDR CACCIVIO: That is all I have. Thank
19 you.

20 CAPT BRANDHUBER: Thank you.

21 MR. ROTH-ROFFY: Thank you, Captain. Do you
22 need to take a break now?

23 CAPT BRANDHUBER: No. I am fine. Thank you.

24 MR. ROTH-ROFFY: Okay. I just have a few

1 questions. I won't take too much more of your time.

2 CAPT BRANDHUBER: I have taken some
3 [inaudible] to answer, but I think it has been
4 important to try to cover some of the perspective,
5 rather than just yes/no.

6 MR. ROTH-ROFFY: Sir, was the Submarine
7 Greeneville required to perform periodic tests or
8 maneuvers aimed at retaining their proficiency in doing
9 some of these maneuvers that they were doing on the day
10 of the collision?

11 CAPT BRANDHUBER: Yes.

12 MR. ROTH-ROFFY: Is there a set periodicity
13 for these tests?

14 CAPT BRANDHUBER: In an emergency main
15 ballast tank blow, yes, we have to do that, either once
16 a year or whatever maintenance is done that impacts the
17 ability of that evolution to be conducted safely as
18 part of the maintenance-free test would allow it to do
19 in an emergency main ballast tank blow, to verify the
20 final absolute that we know it will work and do that.

21 As far as the high-speed turns and the
22 angles, it doesn't say that you will do that with each
23 watch section once a quarter, once a month, once a
24 week, whatever. That is pretty much left up to the COs

1 discretion to determine how often he needs to train his
2 crew to make bends, to be able to do that.

3 MR. ROTH-ROFFY: Is the Greeneville -- or,
4 was the Greeneville subjected to periodic operational
5 readiness exams to assess the proficiency of the crew
6 in performing some of these maneuvers that they were
7 doing prior to the collision?

8 CAPT BRANDHUBER: She has examinations that
9 were conducted in accordance with the periodicity
10 required. As to whether those particular evolutions
11 would be mandated by that particular inspection or not
12 would be a function of the senior inspector and the
13 type of evolutions that were being done on the ship.

14 I think it is very unusual to put the ship
15 into a situation on an operational exam where they
16 would actually do emergency main ballast tank blow. We
17 would simulate doing it, you know, that it would be
18 something we could do. But to actually do it, what you
19 do is then limit the restrictions on the ship.

20 That is why the ships tend to do it when they
21 are closer in the port coming in, because once you take
22 all the air that is in the main -- or, in the air
23 banks, 4,500-pound air, and pour it into those ballast
24 tanks, we have restrictions on being able to resubmerge

1 the ship until those air banks are charged up to a high
2 enough level. So that, if we went down immediately and
3 we had a leak or a problem we had to do that with, we
4 would blow it again, and we wouldn't have the air
5 pressure to do it.

6 So we have got two air compressors that can
7 only compress air at such and such a rate, and it takes
8 a while for the air to get back into the banks to a
9 high enough level. So there are -- their tactical
10 radius exams, their tactical weapons proficiencies, and
11 their operational reactor safeguards exams, and those
12 types of things within the periodicity that they are
13 supposed to do.

14 Now, as to whether those individual events
15 require those exams, I would leave that to the
16 individual examine review.

17 MR. ROTH-ROFFY: Routine evolutions such as
18 going to periscope depth, clearing baffles, tracking
19 sonar contacts, determining solutions, would that be
20 part of some sort of a performance --

21 CAPT BRANDHUBER: Absolutely.

22 MR. ROTH-ROFFY: -- evaluation exam that is
23 periodically conducted on a crew?

24 CAPT BRANDHUBER: Absolutely. That would be

1 part of -- I mean, as these experts that come onboard
2 and watch the duties things, that is part of -- the
3 difference between, if you will, coming onboard to
4 escort some VIPs versus coming onboard as part of an
5 inspection team to examine the thing.

6 I think that is probably the best way that I
7 could articulate that. It was done in that manner when
8 these people -- and they know. They know that those
9 examinations are coming, and people will look very
10 carefully at that. Overviews versus specific views.

11 PANEL MEMBER: These records here, these are
12 recent inspection reports. These are here in support
13 of Captain Kyle's discussions with you. So if you have
14 specific questions about what types of evaluations and
15 inspections are done on the ship, I know Captain Kyle
16 is going to address that with you.

17 MR. ROTH-ROFFY: Okay.

18 CAPT BRANDHUBER: And that is a good point
19 because Captain Kyle is our, you know, head training
20 guy. He works with his team and other things to check
21 those things on a periodic basis on all the submarines
22 in the Force.

23 MR. ROTH-ROFFY: Is it typical, sir, for a
24 submarine to do an emergency -- I'm sorry, I am going

1 to have to think about that question. I will have to
2 come back to this one.

3 Regarding Commander Cassivio comments about
4 risk analysis, is there actually a formal procedure by
5 which the submarine underwent a process of risk
6 analysis to assess the risk involved in doing the
7 emergency blow procedure, emergency deep, that sort of
8 thing? Was there anything -- or is it just kind of a
9 non-formal risk assessment?

10 CAPT BRANDHUBER: I would say it is a non-
11 formal risk assessment, based on the corporate
12 knowledge of all the people who are involved and
13 looking at that. There isn't a checklist that I am
14 aware of that says, if you are going to do this for
15 training, these are the absolute things that you should
16 do. Those are so embedded in our legacy, you know,
17 that we go up and take a look, and do what this skipper
18 did with regards to those, are the types of things that
19 need to be done to verify that this is a safe evolution
20 being conducted.

21 By the way, for the record, we don't
22 disregard the aspect of training on safety or
23 operational risk management. As recently as, I think
24 it was the third -- January 20th, we had all the COs in

1 the Submarine Corps, Pacific, that were not deployed or
2 couldn't be here, together to talk to the Admiral for a
3 day.

4 Of that day, there was an article, one of the
5 presentations was on operational risk management and
6 making sure that we talk to people about being safe and
7 recognizing, again as a reminder, that you need to do
8 that. So we try to remind people that it is a tough
9 business.

10 MR. ROTH-ROFFY: Sir, would it be typical for
11 a submarine to drive their bearings during high-speed
12 maneuvering, or is there a separate, distinct process
13 by which you would drive these bearings?

14 CAPT BRANDHUBER: If the sonar contact has
15 enough noise in the water, and you can handle it as the
16 ship is moving faster, and the water is flowing over
17 the sonar sensors and allow you to still distinguish
18 that this move versus this move at a higher speed
19 versus a lower speed, is not as significant as long as
20 this noise source is strong enough.

21 If the combination of the noise source and
22 the increased self noise from moving at a higher speed
23 causes you to lose contact with the source, then it
24 isn't significant enough, it isn't strong enough.

1 In this case, I am not sure whether they held
2 them during their high-speed turns or not. I don't
3 know.

4 MR. ROTH-ROFFY: Is it typical, sir, on a
5 submarine for a navigator to not only track his own
6 ship's position, but to track the position of contacts?
7 Or, is that something that is done under special
8 circumstances only?

9 CAPT BRANDHUBER: Well, first of all, by the
10 "navigator" -- the navigation party would be the thing.
11 The navigator can't -- on the navigation, on the COM,
12 you know, 24 hours, seven days a week, he has a
13 navigation team that is qualified to maintain the safe
14 navigation of the ship under his supervision.

15 In transiting situations and non high-
16 contact, density situations, a navigational party will
17 not normally be required to keep track of other ship's
18 positions. In exercise situations or in high-contact,
19 density situations where we augment the navigating
20 team, be that electronically with plotters or manually
21 with plotters, yes, the navigation team would be aware
22 of the depth separations or other ship's locations as
23 they compare to the geographic boundaries. So it is a
24 it-depends answer. It is not an absolute.

1 MR. ROTH-ROFFY: Sir, to your recollection,
2 that Friday afternoon, was it unusually heavy in terms
3 of fleet movements in and out of Pearl Harbor, or was
4 it typical?

5 CAPT BRANDHUBER: Not sure.

6 MR. ROTH-ROFFY: Not sure.

7 CAPT BRANDHUBER: It didn't strike me as
8 heavy, so I am not sure. It seemed like a pretty
9 normal day to me.

10 MR. ROTH-ROFFY: That is all I have for you,
11 sir.

12 MR. WOODY: I am Bill Woody.

13 Captain, you mentioned that there was a
14 shudder. Most everyone we have talked to has talked
15 about the two different -- at least two different
16 events.

17 Do you recall just one shudder, or was there
18 a --

19 CAPT BRANDHUBER: I recall the one shudder
20 clearly, easily. I obviously know that there was some
21 other shudder, but it isn't something that sticks in my
22 mind. I recognized the consequences, I think, and the
23 adrenaline started to flow a little bit at the first
24 shudder when I was walking up and I did not cognitively

1 remember a second shudder.

2 MR. WOODY: Visualizing the way a vessel
3 conducts an emergency surface, coming out of the water,
4 and then pulling down the way you described it, did the
5 Greeneville seem to fall under the water, after its
6 bow had hit the water --

7 CAPT BRANDHUBER: Yes.

8 MR. WOODY: -- in normal fashion?

9 CAPT BRANDHUBER: Yes.

10 MR. WOODY: Is there any kind of -- let me
11 ask it this way. Is an emergency ballast blow
12 conducted on most VIP tours, cruises, or some?

13 CAPT BRANDHUBER: We have been trying to
14 ascertain the answer to that, sir.

15 MR. WOODY: Okay.

16 CAPT BRANDHUBER: We have asked for
17 additional data to get that. It will take a long time,
18 the reason being is, the only way you are going to find
19 it, as you know, sir, is looking in the deck logs of
20 the submarines over the past year, and somebody says,
21 we conducted emergency main ballast tank blow here.

22 We will know based on the PMS being done. So
23 we can tell you there is 26 submarines, and we know 26
24 attack submarines and eight Trident. So we know that

1 34 submarines are within their periodicity of doing
2 emergency main ballast tank blow.

3 Over the past year, there has been at least
4 34 of them, but how many other ones were either
5 training or maintenance, where maintenance features
6 have been done. We will have to go back to the
7 information logs to report that, to find out.

8 MR. WOODY: We have been informed that the
9 Captain looked down the sonar bearings, the control
10 technician said that he looked at radar, and he could
11 tell that the Captain was checking those bearings.

12 Would there be any additional benefit for
13 asking for ESM to check the bearing? Would that have
14 been possible? And would any information have been
15 derived?

16 CAPT BRANDHUBER: Yes. It is something that
17 is not specifically bearing-specific. It gives a
18 quadrant, a sector. If you want to get -- at least, my
19 understanding of ESM. Now, whether there is a
20 modernization program on this particular ship that
21 allows you --

22 LCDR SANTOMAURO: Excuse me. This is
23 Lieutenant-Commander Santomauro.

24 I would like to clarify. The ESM operators

1 first initial function is to identify any close
2 contacts at signal strength 4 or 5, which he did not
3 report, and since he was not asked for any further
4 information by the officer of the deck on any contacts
5 of a signal strength of 3 or less. In fact, I believe
6 we didn't even stay at periscope depth very much longer
7 anyway.

8 MR. WOODY: That really, is the point of my
9 question.

10 CAPT BRANDHUBER: If I may, sir, on the point
11 that I -- like I say, sometimes there are these new
12 temporary alterations or ship A&Is that come out on the
13 ship's Alterations and Improvement Items, that, based
14 on the individual ship, I am not sure what they got the
15 latest or the least.

16 MR. WOODY: I can understand that.

17 CAPT BRANDHUBER: But clearly, the ESM
18 operator, whatever the level of the ESM signal is,
19 would have to request, after determination of the
20 strength, another mast and a direction-finding
21 capability to get an exact bearing to an ESM contact.

22 MR. WOODY: My question was, if the Captain
23 -- hypothetically, had the Captain asked ESM, "Do you
24 have anything on the bearing I am looking at?" and gave

1 the bearing, saw the bearing that he was looking down
2 to check out --

3 CAPT BRANDHUBER: He told them he had
4 something in there.

5 MR. WOODY: Something in there. Would that
6 have give him any different information that would have
7 been useful?

8 CAPT BRANDHUBER: Not without raising a mast
9 to do the actual bearing. He would have known that
10 there was something there.

11 MR. WOODY: Something there.

12 CAPT BRANDHUBER: Yes, something there. So
13 that is the additional information that would have been
14 useful, yes.

15 MR. WOODY: To what extent might it have been
16 useful, if you can characterize it? Again, it is
17 another passive bearing.

18 CAPT BRANDHUBER: But, sir, the idea that it
19 is a bearing versus a quadrant or direction, you know,
20 is --

21 MR. WOODY: I understand.

22 CAPT BRANDHUBER: I don't want us to get to
23 think, and I know you don't, sir, that it is just,
24 there it is. You know, it is somewhere over there. If

1 he would have went that way, it would have given him
2 another thing to spend more time looking at down that
3 section, clearly. Clearly.

4 PANEL MEMBER: Can I ask for some
5 clarification real quick, based on your question?

6 CAPT BRANDHUBER: Sure.

7 PANEL MEMBER: Maybe I am just
8 misunderstanding what we have got here. Is the Early
9 Warning System, the ESM system, attached to the
10 periscope itself, an omnidirectional, which means that
11 it wouldn't matter which way the scope was pointed.
12 All you are going to get is a noise of signal strength.
13 You really don't even have any idea of what quadrant
14 the bearing is coming from. You just know that there
15 is --

16 LCDR SANTOMAURO: No, no. That is incorrect.

17 PANEL MEMBER: Is that incorrect?

18 PANEL MEMBER: Well, I will let Rich talk
19 about it. You can manually DF it, you have it down to
20 what the chief of staff is talking about.

21 LCDR SANTOMAURO: That is correct.

22 PANEL MEMBER: Basically, we keep our arms
23 out on the same basis. We are basically saying that
24 instead of getting it down to a bearing, say, plus or

1 minus five degrees, we are really talking plus or minus
2 about roughly about a 45-degree window, a 30-, 45-
3 degree window here, if we stopped to manually DF this
4 off the periscope, or as Captain Brandhuber indicated,
5 we have an additional antenna that we can put up.

6 Now, after all the previous searches the ESM
7 operators referred to are done, we could put that
8 antenna up, and that would begin the manual search and
9 refine that bearing.

10 PANEL MEMBER: So this antenna on the scope
11 does have a very rough bearing capability. Is that
12 what you are saying?

13 PANEL MEMBER: It has the DF capability that
14 my experience tells me the scope will give you, if,
15 after you manually do it -- remember, we said we go to
16 PD in the omni mode. If you manually DF it, my
17 personal experience on this scope tells me you can do
18 this, plus or minus -- I can tell you it is either
19 somewhere between north and east, it is between east
20 and south, it is between south and west, or it is
21 between --

22 PANEL MEMBER: That is in my quadrant.

23 MR. WOODY: I understand.

24 PANEL MEMBER: This is, I have got to tell

1 you, not easy. It takes rotating the scope, putting it
2 in the --

3 MR. WOODY: As we said -- the question was,
4 the Captain was looking down the sonar bearings, and
5 had he asked for the ESM to look at the bearings, would
6 that have given him any additional information.

7 LCDR SANTOMAURO: It would have been useful.

8 PANEL MEMBER: Lieutenant-Commander
9 Santomauro?

10 LCDR SANTOMAURO: Sure.

11 PANEL MEMBER: I would like just to say that
12 they had numerous X-Band radars that were from that
13 general direction. I don't believe, if he had asked
14 the ESM operator to range a contact or try to correlate
15 a contact with any sonar contacts that they had, that
16 the ESM operator under circumstances that day, would
17 not have been able to do so.

18 MR. WOODY: All right. The Captain, as you
19 mentioned, looked in the area of the baffles. You
20 deduced that probably the reason he did so was going to
21 surface in that general direction.

22 I know that hindsight is 20/20, but if you
23 had a contact out there, is there any kind of doctrine
24 that says, if you are going to surface, surface away

1 from sonar contacts?

2 CAPT BRANDHUBER: No, sir.

3 MR. WOODY: Nothing like that.

4 CAPT BRANDHUBER: Nothing like that.

5 MR. WOODY: If you have a clear area
6 somewhere else?

7 CAPT BRANDHUBER: I hate to say that that 18
8 years to get the submarine CO, or that 15 years to get
9 you the EXO, or the nine years to get you the
10 department head, or that process of getting your
11 dolphins, sir, as you know, instills in you that you
12 drive the bearings, to get the contacts on the right
13 with some field of passive ranging, on the right, going
14 right, and contacts on the left with some degree of
15 passive ranging, going left, and pick a course that
16 will allow you to, if you have done that, that you
17 expect, if you will see ships, that they will be
18 driving in a manner that will tend to generate open-air
19 CPA rather than closing it.

20 There are ways that we do that passively,
21 that we have done historically, that we try to do that.

22 That is always not that easy to do. You know that.
23 That is not always that easy to do.

24 MR. WOODY: If the vessel is swinging left,

1 and then the emergency surface alarm is sounded and the
2 helm was put midships, how much would the ship contain
3 its swing and route up under the emergency blow?

4 CAPT BRANDHUBER: With the speed that the
5 ship had on it, it wouldn't steady on midships, as you
6 know. If you want to steady the ship on a course,
7 usually the helmsman shifts the rudder to the same
8 amount in the opposite direction to check the swing of
9 the -- ship, and then steadies up on the course that
10 was ordered.

11 In this case, if have just put it in
12 midships, which I don't know that I know that, other
13 than your telling me that, it would swing more,
14 continually to swing in that direction. How much, I
15 can't tell you.

16 MR. WOODY: We heard a lot of talk about the
17 civilians being at the controls, specifically the
18 helmsman, the civilian at the helm, during the
19 emergency surface. Would that have made any difference
20 in this event?

21 CAPT BRANDHUBER: For the record, let me
22 answer a couple of things about that. I did not know
23 that he was in the helm seat. I told you the two that
24 I saw. I didn't find out that he was in the helm seat

1 until Saturday morning, after we had had them in the
2 briefing theater and the Admiral had talked to them and
3 apologized to them for the events, as I had previously,
4 and talked to them about everything from this
5 gentleman.

6 Because the names are now, I think, out
7 there, Mr. Cleary, by definition, he walked by me and
8 thanked me for all of my effort during the course of
9 the evening and the day, and whispered in my ear, "You
10 know, I was sitting in the helm chair, that the Captain
11 had slipped me in there right before we went to the
12 surface."

13 I just didn't realize that until then. I
14 just didn't know that. If you think about the angles
15 and the curtains, and where the guy is and stuff like
16 that, he was right there, and I guess he slid him in,
17 and we just didn't see that.

18 Having said that, once you commit this
19 submarine to that emergency blow, rudder midships,
20 whether there was angle on the planes, being held
21 there, or zero angle on the planes, I am still not sure
22 at this moment where that was, the ship is going to the
23 surface. The ship is going to the surface.

24 MR. WOODY: So, in other words, it would not

1 make any difference.

2 CAPT BRANDHUBER: Not to my way of thinking.

3 MR. WOODY: I was interested in what prompted
4 you to personally make the first telephone call.

5 CAPT BRANDHUBER: There is no significant in
6 that.

7 MR. WOODY: Could you discuss that? I mean,
8 you are represented onboard and you recognize the Court
9 is informing the High Command of --

10 CAPT BRANDHUBER: I was very aware -- as I
11 said, I looked and I also checked to see that the ship
12 was riding on the surface, and directed, as I said, the
13 CO, directed a strong term, looked at the CO,
14 determined that the CO -- I told him to slow down,
15 breathe, he needed to do a search for rescue, he needed
16 to get the people on the search for rescue moving, and
17 get that started.

18 I thought the most cognitive thing that I
19 have seen screwed up before is that we don't get the
20 word out properly because somebody is trying to write
21 the message the right way, got the text of the message
22 or something like that.

23 To me, the best thing that we could do at
24 this moment in time was make sure that everybody was

1 aware of what had transpired, get the word to the
2 appropriate people, and we would then come back. As I
3 came back out again, after message had been made, help
4 more in the search and rescue operation.

5 I have been told that that message -- I know
6 that message was in in less than five minutes, from the
7 time of the occurrence to when people were aware of
8 that.

9 MR. WOODY: Can you comment? We have heard
10 that this area here is not a busy area in comparison to
11 other areas that you have mentioned, as far as vessel
12 traffic.

13 For VIP cruises, is there any continuing
14 thoughts given or any kind of analysis given to the
15 area to determine that it is a good, safe area? Or, is
16 this something that is well established? Could you
17 talk to us, in other words, about the safety of this
18 particular operating area for VIP cruises?

19 CAPT BRANDHUBER: I am not aware of any
20 cognitive procedure or plan that discusses a thing that
21 says we should do VIP cruises in a specific area. You
22 have to recognize that sometimes we do -- it just
23 struck me. Does anyone know who Father Hessberg is,
24 the president of Notre Dame emeritus?

1 Father Hessberg rode from San Diego to Hawaii
2 on USS Portsmouth within the past month for the whole
3 way across. So we do VIPs in various ways. It isn't
4 just done one day in and one day out, local and things
5 of that nature. The answer is no.

6 You know, the areas are the areas that we
7 have assigned water space in. We know where we can
8 safely submerge in and we know that the commanding
9 officers of the ships that we assign to do these things
10 have experience enough and know how to operate their
11 ship well enough that they know -- and we told them in
12 the past that they can't do an emergency main ballast
13 tank blow prior to a VIP cruise.

14 MR. WOODY: That is all the questions I have.
15 Thank you.

16 MR. STRAUCH: This is Barry Strauch.

17 Unfortunately, I filled up with a number of
18 questions since I last asked questions. Should we take
19 a break now? Does anyone need a break before we start?

20 CAPT BRANDHUBER: I am fine.

21 MR. STRAUCH: I would like to follow up on
22 some of the questions that Bill had. You said that
23 there were -- and correct me if I paraphrase you
24 incorrectly, that as far as VIP cruises go, there are

1 no prohibitions against doing an emergency tank blow-
2 out, as you understand it.

3 CAPT BRANDHUBER: Right.

4 MR. STRAUCH: Are there maneuvers, other than
5 classified maneuvers, that you won't do for VIPs
6 because of safety reasons?

7 CAPT BRANDHUBER: Yes. We won't put a VIP on
8 the periscope going to periscope depth, as being the
9 only person who is the sole lookout for the ship when
10 transiting 150 feet from surface to periscope depth.

11 Never in my life, have I ever seen or heard of
12 that done, and that would be something that we wouldn't
13 do.

14 MR. STRAUCH: Okay. What about any kind of
15 things involving the ship? Are there any steps you
16 won't have the --

17 CAPT BRANDHUBER: Oh, you mean like them
18 physically do it versus under supervision? There is
19 nothing they do independently.

20 MR. STRAUCH: What I mean is more -- angles
21 and dangles, for example. It is okay to do that with
22 civilians onboard.

23 CAPT BRANDHUBER: Onboard but not in the
24 control stations.

1 MR. STRAUCH: Right. I am talking right now
2 onboard. Are there other maneuvers similar to -- not
3 only just angles and dangles, the ship, that you put
4 the ship through its paces, that you would not do with
5 civilians onboard because it may endanger their safety?

6 CAPT BRANDHUBER: Evolutions. Is that --

7 MR. STRAUCH: Yes. Are there any evolutions
8 you won't do?

9 CAPT BRANDHUBER: And --

10 MR. STRAUCH: I can think of a lot of
11 evolutions I wouldn't do because, No. 1, the risk to
12 the ship, the risk to the individuals. There are a lot
13 of evolutions that we must practice as a submarine
14 force that are very, very tightly controlled in
15 preparation for deploying.

16 CAPT BRANDHUBER: Yes, deployments and stuff
17 like that, sure.

18 MR. STRAUCH: And we only do these under
19 controlled situations, which ships force. So there is
20 no way we would do these. These are --

21 CAPT BRANDHUBER: Those are another
22 classification.

23 MR. STRAUCH: We have evolutions that
24 typically we won't practice with UI. We wait until an

1 operator is fully qualified for it. Yesterday, when we
2 went into the attack, with the ship control trainers,
3 one of the things I pointed out was the fact that the
4 whole reason there are ship control trainers -- one of
5 the reasons the ship control trainers exist is to
6 practice evolutions where the risk becomes not worth --
7 how do I see this. To conduct the evolution at sea
8 would be unnecessarily risky, so we build a trainer to
9 do it here.

10 As an example, we train for flooding. We
11 train for flooding at all depths that the ship would
12 operate at. Do I necessarily want to take the
13 submarine to test depth to now simulate flooding so I
14 can train my guys? No. Do I want them to know the
15 right actions and experience that? Yes. I go to a
16 trainer to do those things.

17 CAPT BRANDHUBER: That is a very good point.
18 That point I would -- I didn't get into those type of
19 things. There are things that we do on deployments and
20 on operational missions that, no, we wouldn't ever do
21 because of A classification or B, because they are not
22 necessary to do.

23 Drills and emergencies, you know, things like
24 flooding drills or other fire or casualty drills, would

1 we do those with a VIP onboard? No. We test ourselves
2 with drills and drill monitors, and run through
3 procedures to see that we could practice to combat
4 flooding or fire, or other things like that. Sure we
5 do.

6 I lost synch on the question there for a
7 second. I was thinking strictly in things that I was
8 thinking about that we would do with VIPs onboard, and
9 the one I came up with was, clearly, someone on the
10 scope, going to periscope depth.

11 MR. STRAUCH: Right. What about evolutions
12 that are permissible to do on a vessel as opposed to a
13 trainer that are not part of deployment? Are there any
14 evolutions that are prohibited from being performed
15 with civilians onboard that are permissible, otherwise,
16 on a ship that is not in deployment because it might
17 endanger the safety of the civilians?

18 CAPT BRANDHUBER: We wouldn't do anything to
19 endanger the civilians.

20 PANEL MEMBER: I thought you answered that
21 question already, because the issue is now, if you look
22 at that on the flip side, you are saying, are these
23 evolutions that I would do with Ship's Force when
24 civilians aren't onboard that would endanger Ship's

1 Force, and I don't do any evolutions that would
2 unnecessarily risk Ship's Force either.

3 [Tape change.]

4 [In progress] -- that is, by having the
5 civilians there or by conducting these evolutions, they
6 are of a complicated enough nature that they may not be
7 prudent to do during a civilian tour?

8 CAPT BRANDHUBER: Sure.

9 PANEL MEMBER: I think there has got to be --
10 there are probably some of those.

11 MR. STRAUCH: Could you site what some of
12 those are?

13 PANEL MEMBER: I think the one we talked
14 about was crash-backs where we typically go from ahead
15 full bells to answering rapid astern bells. The risk
16 is there that I may cut off my total array if I haven't
17 adequately prepared for the evolution and pulled it in.

18 If by some chance, I should put -- I think
19 you remember the EXO talking yesterday about the fact
20 that submarines, because the unique construction with a
21 single screw, the propeller being aft of the rudder,
22 operating in the astern direction, it is an
23 unpredictable event.

24 That is only on the surface, he was talking

1 about. If you do that submerged, now you have the
2 depth considerations. So those are evolutions that
3 typically -- you know, we have to train for those
4 evolutions, and we do them, but I mean, the risk, to
5 me, the risk would be higher if I did this with
6 civilians, if I had them, possibly, sitting in watch
7 stations at the time. So I would not do that.

8 MR. STRAUCH: Would any of this be written
9 anywhere?

10 PANEL MEMBER: Not that I am aware of.

11 MR. STRAUCH: Okay. Thank you.

12 Are there certain parameters that apply to
13 performing emergency blows, parameters, I guess,
14 involving ship state or sea state, other than depth?
15 Are there any other parameters that apply to performing
16 an emergency blow?

17 PANEL MEMBER: I think we answered that
18 questions previously. I thought you were here. I
19 mean, the bottom line is this is an emergency procedure
20 designed to rapidly bring the ship back to the surface
21 in the event of several casualties, but primarily a
22 flooding casualty.

23 So therefore, the restrictions on the ship
24 would be, if you feel you have flooding and you are

1 going to dive unless you main ballast and blow, and you
2 feel you are going to lose the submarine --

3 CAPT BRANDHUBER: At this point, it is not in
4 the real world, it is in the context of --

5 PANEL MEMBER: Oh, okay.

6 CAPT BRANDHUBER: I told you for maintenance,
7 we do it, and I told you we do it for real blows, and I
8 told you we do it for training on occasions. I
9 understand your question with regards to, is there
10 anything that says, if you are going to conduct this as
11 either a training evolution or as an evolution for
12 demonstration of prowess of the nuclear submarine,
13 these are the conditions that need to be met and
14 checked off to do that. I don't know of any of those
15 for that type of procedure.

16 MR. STRAUCH: Are there any prohibitions to
17 evolutions that apply as a result of being in a high
18 vessel traffic area? Are there things that you can't
19 do there?

20 CAPT BRANDHUBER: It is a warship.

21 MR. STRAUCH: And therefore?

22 CAPT BRANDHUBER: I don't say that glibly. I
23 think we are getting to know each other a little bit
24 better, but this is a warship. Its mission is to

1 operate and train its people to be ready to take that
2 ship and do the Government's -- the Nation's business
3 if necessary, and restrictions by -- perceived
4 restrictions by other agencies -- you know, this a very
5 traumatic and tragic experience, but it isn't something
6 that happens frequently.

7 Restrictions outside of Department of the
8 Navy or the Department of Defense on the operation of
9 that ship would be something well above [inaudible].

10 MR. STRAUCH: You said that the Admiral met
11 with the civilian afterwards, after the event.

12 CAPT BRANDHUBER: Yes. I can't stop talking.

13 MR. STRAUCH: Go ahead, sir.

14 PANEL MEMBER: Well, I was -- I guess, are we
15 really into something we need?

16 MR. STRAUCH: I was going to ask about --

17 PANEL MEMBER: Are we talking about the
18 event, now?

19 MR. STRAUCH: We will go off the record.

20 PANEL MEMBER: Yes.

21 [Discussion held off the record.]

22 MR. STRAUCH: You said earlier that one thing
23 that Commander Waddle hadn't done was a Pacific
24 deployment. What is the significance of a Pacific

1 deployment? How does that affect the Command's
2 evaluation of a commander's performance?

3 CAPT BRANDHUBER: That is the ultimate test.

4 That is what our job is. That is what we prepare and
5 train ourselves to do at all times, be ready to carry
6 out that deployed mission, or if necessary, war-
7 fighting response, be it Tomahawk cruise missile or
8 shooting torpedoes, gathering intelligence,
9 surveillance information.

10 That is what we do on deployment, and we take
11 that young crew with a CO and train them up to go to do
12 six months of forward operations, whether it be in the
13 Persian Gulf or wherever else it is, how that CO
14 separated from the support structure of his squadron
15 commander and the support structure of his maintenance,
16 the support structure of his training people and all
17 the other support structure that is inherent to here
18 around Pearl Harbor or around San Diego.

19 There is operational support for him. We
20 don't sent him out, exactly, on his own. He spends 40
21 or so odd days, depending upon the mission, totally.
22 That CO with his crew, with nobody else onboard.

23 How that person handles that ultimate six-
24 month test and brings his ship back, and what do people

1 that he worked for overseas say about the performance
2 of that ship and how they carried out their mission is,
3 if you will, the ultimate assessment of how that COs
4 performance is.

5 MR. STRAUCH: Thank you. Are there regular
6 inspections of a submarine and its performance?

7 PANEL MEMBER: I think we already indicated I
8 would like to defer that. Captain Kyle is here to talk
9 to us about that, and is more prepared to talk about
10 inspections.

11 MR. STRAUCH: Okay. You said one of the
12 advantages of doing an emergency descent is that you
13 minimize the time that you don't have situational
14 awareness.

15 CAPT BRANDHUBER: Physical situational
16 awareness on the surface, certainly.

17 MR. STRAUCH: How much can things change in
18 the time that the vessel is out of position to offer
19 situational awareness to where its commander -- can the
20 situation be that dynamic that things could change
21 much?

22 CAPT BRANDHUBER: There are things like
23 hydrofoils or hydroboats. There are people with sonar
24 contacts that were not recognized, based on biologics

1 or atmospherics that may come into play. It is a
2 dynamic situation, and we feel as submariners, once you
3 leave periscope depth with a visual picture, if you
4 will, in your mind, on the plotter, it just
5 deteriorates from that point on until the next time you
6 are able to come, visually, back up again and verify
7 what you what your information signals are telling you
8 is fact, based on what you can see.

9 MR. STRAUCH: You said the Secretary of
10 Defense implemented a policy to encourage civilian
11 interaction with the military. When was this policy
12 implemented?

13 PANEL MEMBER: This is Commander Caccivio.

14 We have already provided a big, detailed
15 packet to the PAO and Mr. Hammerschmidt, if you would
16 like to review that. I would recommend that we do that
17 so we can move on.

18 MR. STRAUCH: Okay.

19 CDR CACCIVIO: It is a big packet, plenty of
20 that, all the dates and the taskings, everything. It
21 also, in addition, gave you the results of all the
22 interactions we have had, the embarkations and tours in
23 the Pacific Fleet in 1999 and 2000.

24 MR. STRAUCH: Okay. What are the sources

1 that a CO uses for making a decision to go to the
2 surface? What are the ultimate sources of information
3 that he has available to him?

4 CAPT BRANDHUBER: Sonar.

5 MR. STRAUCH: Sonar? That is one. There is
6 also the visual information.

7 CAPT BRANDHUBER: He doesn't have visual
8 until he is on the surface. The question, I thought,
9 sir, was, what decision does he make to go to periscope
10 depth.

11 MR. STRAUCH: Well, let's say from periscope
12 depth to the surface, what are the sources of
13 information that he has?

14 CAPT BRANDHUBER: Sonar. He is looking out,
15 or his officer of the deck has the scope raised, and he
16 is looking out the scope. If it is at night, all you
17 see is black and luminescence and things of that
18 nature. If it is daytime, the reason you look out the
19 scope is in the event that you could see a hulk or a
20 small boat that was just sitting there that you hadn't
21 picked up on sonar. It increases your visual
22 recognition.

23 MR. STRAUCH: ESM? Wouldn't that be a
24 third --

1 CAPT BRANDHUBER: ESM isn't up until the
2 periscope is out of the water or the top of the scope
3 gets to above the water level.

4 MR. STRAUCH: Well, when that happens, are
5 there only three sources of data that a CO would use:
6 sonar; visual information from the periscope; and ESM?
7 Or, is there any other source of information that we
8 haven't discussed, that I am not aware of?

9 CDR CACCIVIO: The only thing I can think is
10 if you have --

11 CAPT BRANDHUBER: [Inaudible] if you had some
12 data, but that is dated. Remember, that goes back to
13 the discussion of situational awareness on the surface.
14 You go back down again, your situational awareness and
15 that information is old, it isn't current. So you can
16 look at that, you would know that, but that isn't
17 current information.

18 MR. STRAUCH: Of those three, visual, ESM,
19 and sonar, how much confidence do you have in detecting
20 a target with each of them?

21 CAPT BRANDHUBER: Sonar high, relatively.
22 You know, it isn't absolute, sir. You know that. I
23 know you do. I am not trying to -- it isn't absolute,
24 but sonar is -- that is our primary sensor source, and

1 that is what we count on using, and that is what we
2 look for.

3 The only reason why I brought up the dark is
4 because if you come up to periscope depth at night, as
5 you saw yesterday, that scope is not going to see a
6 hulk in the water. Maybe if there was some permanent
7 biolescence moving around there or something like that,
8 you would see it, but the scope isn't really -- when
9 the scope breaks the water, if it is a moonless night,
10 it is very difficult, even to discern the difference
11 where the water is and where the horizon is, because it
12 is absolutely pitch black.

13 Then the ESM is not available until the top
14 of that little antenna breaks through the water, and
15 that is why the guy listens for the signal strengths
16 that he talked about. If it has got very high signal
17 strength, then we imply that the guy is close, but if
18 it is just beep, beep, beep, bop, you know, that's why
19 you've got the guy listening.

20 MR. STRAUCH: So, how much confidence do you
21 have in the probability of detection with ESM, once
22 ESM --

23 CAPT BRANDHUBER: High.

24 MR. STRAUCH: You have high?

1 CAPT BRANDHUBER: As long as their emitting
2 and it is in the band and it is in omni. You will hear
3 -- if they are transmitting, you will hear the signal
4 in that omni band.

5 MR. STRAUCH: And visual, how much confidence
6 do you have?

7 CAPT BRANDHUBER: Depending upon what the
8 conditions are like.

9 MR. STRAUCH: Let's say they were the
10 conditions that we had at the time of the accident. I
11 guess, what, four- to six-foot swells?

12 CAPT BRANDHUBER: In a daytime condition with
13 white-hulled back against the backdrop of Honolulu city
14 buildings and things of that nature? It is not as good
15 as it would be open ocean, because if it is out there
16 by itself in open ocean and you are not looking against
17 the backdrop of something, it stands above the water by
18 itself, or behind it is the water.

19 MR. STRAUCH: Okay. Suppose it is a day of
20 solid overcast --

21 CAPT BRANDHUBER: It was overcast that day.

22 MR. STRAUCH: That is why I am asking.

23 -- and you have a white-hulled vessel, to
24 what extent would the white background of the overcast

1 obscure the conspicuity of a white-hulled vessel?

2 CAPT BRANDHUBER: Much more so than what it
3 would be on a perfectly clear day like it is out there
4 today.

5 MR. STRAUCH: Do we know what the color of
6 Ehime Maru hull was?

7 CAPT BRANDHUBER: I saw it when I saw out the
8 scope, as I talked to you about, but when I saw it out
9 the scope it was a white-hulled ship.

10 CDR CACCIVIO: Don't you have a color
11 photograph?

12 MR. STRAUCH: Yes, I do.

13 So, in point of fact, having an overcast
14 would degrade --

15 CAPT BRANDHUBER: Absolutely.

16 MR. STRAUCH: -- the visual recognition.

17 CAPT BRANDHUBER: And also, the up and down
18 of the swells and the sea swells that the white spray
19 that comes off of the sea, you know, that also mixes
20 in. If you look at it during its heavy up as it
21 sprays.

22 MR. STRAUCH: Okay. And now my last
23 question. The Lieutenant-Commander talked about
24 funding as a factor in modernization. I guess he is

1 involved in the modernization.

2 If you funding was not an object --

3 CDR CACCIVIO: Not an object, or not an
4 issue?

5 MR. STRAUCH: Not an issue, I should say, you
6 could spend all the money you wanted on the
7 Greeneville. What equipment would you have put in
8 there that wasn't there at the time of the accident
9 that could have helped?

10 CDR CACCIVIO: I might be able to save some
11 time again and ask if -- I am sure Captain Kyle would
12 be more than happy to address that question because he
13 continuously discusses modernization issues as far as
14 citing what tactical pieces go onboard.

15 PANEL MEMBER: If you are okay with that, I
16 think --

17 CDR CACCIVIO: Either one of these gentlemen
18 could answer it. I just think, I mean, Captain Kyle is
19 probably more into the details of trying to figure that
20 out and really ranking them one step above the other as
21 to what is prioritized.

22 CAPT BRANDHUBER: I will tell you this. It
23 still relies on the recognition of the person of the
24 contact. Unless there is some magic sensor that you

1 can go out without touching, and it pulls on your --
2 you know, sends you an electrical shock, or sends it
3 down your leg or something like that.

4 The person who is looking out the scope has
5 to recognize that there is something there. Or it is
6 the person with the ESM, or the person that is right
7 there. They have to recognize it. They can't overlook
8 it.

9 MR. STRAUCH: Thank you, Captain.

10 CAPT BRANDHUBER: Thank you.

11 MR. STRAUCH: This has been a big demand on
12 your time, and we appreciate it.

13 CAPT BRANDHUBER: If I may, I was going to
14 say something, if I may. I see the signal out here.
15 This young -- I guess he is a lieutenant or whoever,
16 has been here, sitting here all day, listening to us
17 fanning the breeze, and he hasn't had an opportunity to
18 do anything.

19 I would like to ask just to appreciate his
20 time here and everything, if he had something that he
21 was thinking about.

22 PANEL MEMBER: Thanks, Captain. Going on
23 your question, I just want to make it for the record,
24 myself being a surfer, I think -- I guess I would kind

1 of compare my height, by being about the same with what
2 a periscope would be. There are instances in the
3 Hawaiian waters where I know there are days when it is
4 overcast, it is hard to distinguish between where the
5 horizon starts and the sky ends.

6 I mean, there are days where the swells are
7 big, and I am sitting there under the line of the surf
8 where I would caught by the surf because I didn't see
9 it. I think that is very important to know. That is
10 just for the record.

11 LCDR SANTOMAURO: This is Lieutenant-
12 Commander Santomauro.

13 I also believe that you are not going to be
14 able to possibly see Honolulu out of a scope 100 miles
15 away with a backdrop. I doubt that.

16 CAPT BRANDHUBER: I'm sorry?

17 LCDR SANTOMAURO: I am not positive of that.
18 I am not sure that you could actually see --

19 CAPT BRANDHUBER: Eighteen-thousand yards,
20 the skyscrapers of Honolulu? What are we talking -- I
21 don't understand what you are telling me.

22 MR. ROTH-ROFFY: They said ships, as a matter
23 of fact, when they got on the surface, they could
24 barely see Diamond Head.

1 CAPT BRANDHUBER: Oh, see. I heard "again."
2 I looked down the line, bearing at the sinking ship,
3 and did not study the particulars of the day that way.

4 MR. ROTH-ROFFY: Because it was overcast. On
5 a nice, clear day you would probably see it, but on
6 that day, they said when they were on the surface, they
7 could see Diamond Head barely, and all over the land --

8 CAPT BRANDHUBER: So Barry was saying it was
9 hazy enough that down the distance, that you couldn't
10 see the backdrop, whether it was green or the Hawaiian
11 Islands or whatever. Okay, I got you. I got you.

12 MR. ROTH-ROFFY: This is Tom Roth-Roffy. The
13 time is --

14 CAPT BRANDHUBER: May I say something?

15 MR. ROTH-ROFFY: Yes. I'm sorry, sir.

16 CAPT BRANDHUBER: I'm sorry. I just wanted
17 to tell you all again how sorry I am that you all are
18 here, that we had to do this. It is not something that
19 is pleasant or something that anybody set out that
20 morning to do, and I don't want you to walk away from
21 your experience with the United States Navy Submarine
22 Force thinking that there are people who day in and day
23 out aren't trained, aren't equipped, and aren't
24 prepared to do the best they possibly can on a

1 continual basis.

2 I talked to you briefly about the screening
3 process, I talked to you about the training process, I
4 talked to you about the qualification process, and I
5 talked to you about the pride -- or, if I didn't, I
6 will tell you about the pride that most submariners
7 have in what they do, and that they are very proud of
8 their ships and proud of their work, and work hard to
9 do the right thing.

10 As you will see, the representative that was
11 involved today, I would tell you, please don't draw all
12 of your conclusions about the United States Submarine
13 Force based on your observations of a short period of
14 time, and that there are good, solid, hard-working
15 people that are trying to do the best jobs they can.
16 We try to learn and move on and train, and go to the
17 right problem rather than just shotgun for everything.

18 Finally, I wanted to thank you for your time,
19 and I appreciate it. If there is anything I can do for
20 you in the future, please don't hesitate to contact me
21 in the interests of clarification on the events of that
22 day, or making sure that we get the best information we
23 can to learn what we can from this.

24 MR. ROTH-ROFFY: Yes, sir. Thank you very

1 much for your time. Often we do recall -- or, have
2 follow-up questions, and we appreciate your offer to
3 speak with us again, maybe over the phone or maybe by
4 e-mail, if that is okay with you, just to maybe clarify
5 certain points. Again, we appreciate your time for
6 coming down here and speaking with us.

7 CAPT BRANDHUBER: Thank you. I would like to
8 ask while we are on the record. You all will have the
9 luxury of us typing this and everything like that. Is
10 there is any reason that I can't have a copy of my own
11 transcript of what was said?

12 I would make it official that I would like to
13 have a copy of that.

14 MR. ROTH-ROFFY: Yes, sir. We can provide
15 you directly a personal copy of the paper transcript.

16 CAPT BRANDHUBER: Thank you very much.

17 [End of interview.]
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